Appl. No. 09/759,106 Amdt. dated March 29, 2004 Reply to Office Action of March 22, 2004 PATENT

## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

## Listing of Claims:

Claims 1.-16. (canceled)

Claim 17. (currently amended) A method for detecting a characteristic of a fluid, the method comprising:

- (a) inserting a probe into a first fluid channel defined by wall members in a microdevice, wherein the microdevice includes the first fluid channel and a second fluid channel;
  - (b) detecting a characteristic of a first fluid flowing in the first fluid channel;
- (c) moving the probe from the first fluid channel through an opening in one of the wall members defining the first fluid channel and to a the second fluid channel adjacent to the first fluid channel; and
- (d) detecting a characteristic of a second fluid flowing through the second fluid channel.

Claim 18. (original) The method of claim 17 wherein the probe comprises an electrical sensor.

Claim 19. (original) The method of claim 17 wherein at least the first fluid contains proteins.

Claim 20. (original) The method of claim 17 wherein each of the fluid channels has a width less than about 1000 microns.

Claim 21. (original) The method of claim 17 wherein the first and the second fluids comprise a laminar profile.

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Claim 22. (original) The method of claim 17 wherein (b)-(d) are performed without exposing an end portion of the probe to air.

Claims 23.-28. (canceled)